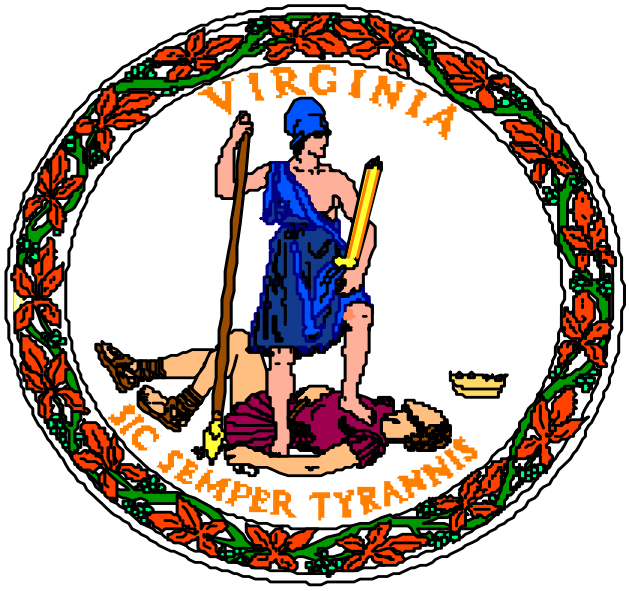
2004 ANNUAL REPORT
SUMMARY OF SURVEILLANCE DATA FOR VIRGINIA CHILDREN WITH ELEVATED BLOOD LEAD LEVELS



VIRGINIA DEPARTMENT OF HEALTH
OFFICE OF EPIDEMIOLOGY
DIVISION OF PUBLIC HEALTH TOXICOLOGY
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RICHMOND, VIRGINIA 23219

PART A: STATEWIDE STATISTICS

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INTRODUCTION

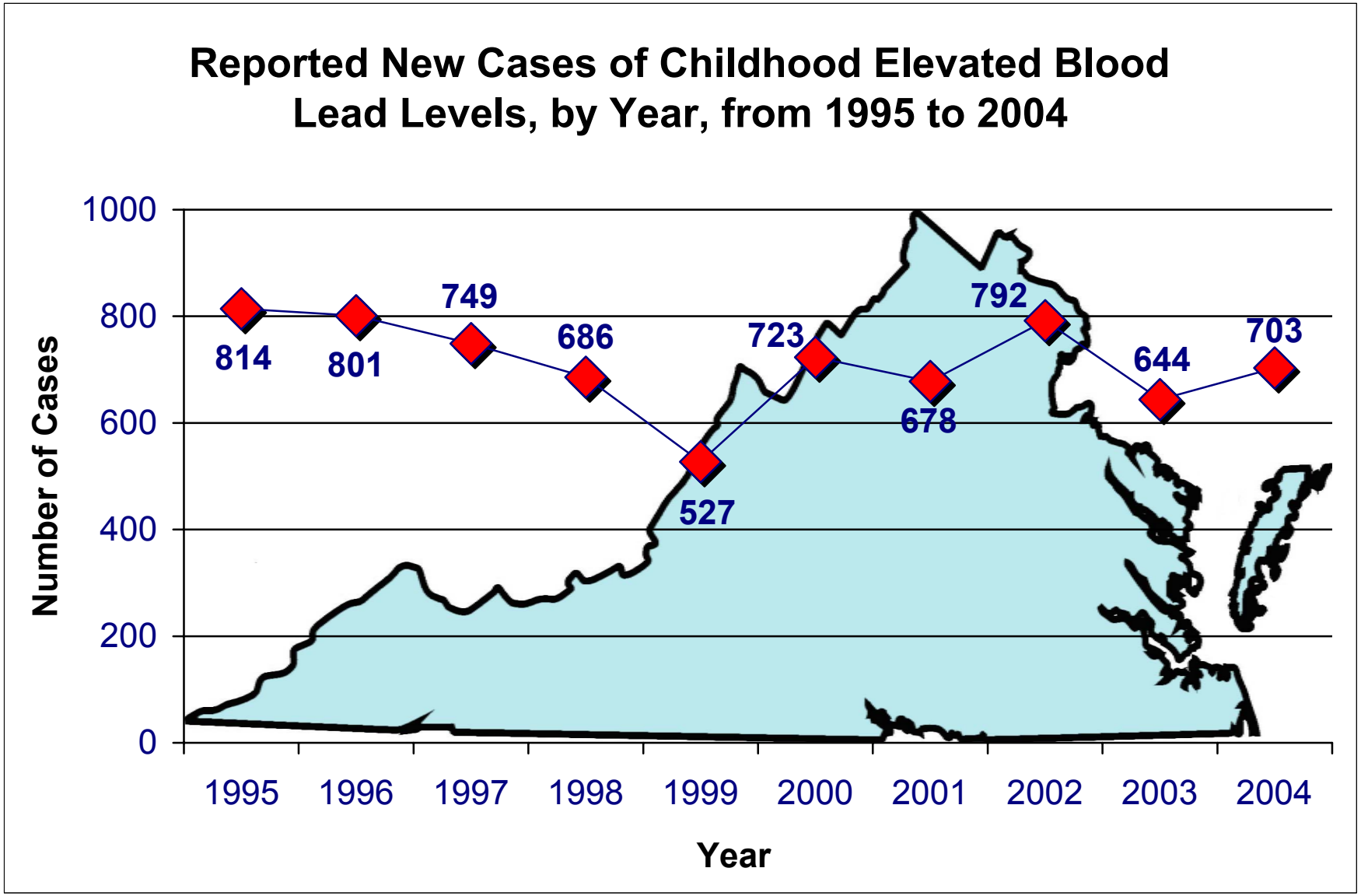
The summary of surveillance data for Virginia children reported with elevated blood lead levels is presented in this 2004 annual report. The report includes all data submitted to the Virginia Department of Health, Office of Epidemiology, for any child age 15 years or younger, with an elevated blood lead level of greater than or equal to 10 micrograms per deciliter (µg/dL). The data include newly reported cases for 2004, as well as comparative summary data for 2002 and 2003.

An elevated blood lead level in children is a reportable condition in Virginia as stated in the Regulations for Disease Reporting and Control. The Division of Public Health Toxicology within the Office of Epidemiology is responsible for gathering and tracking information on these children, and maintaining the statewide database. Reports are received from various sources including laboratories, hospitals, physicians, and local health departments. By gathering the information in one centralized location, the data can be closely scrutinized for accuracy and completeness, and duplicate records can be eliminated. This is an incidence database. Therefore, a child is counted only once based on the date of the initial elevated blood lead report. Any follow-up test results are noted within the existing initial record, including data from different reporting years. Information is continually updated for each child as new reports are received.

The data in this report are presented in several formats. Reported cases are compared by race, sex, age, and range of blood lead levels. Additionally, total cases are given for each locality, health district, and region in the state. Population figures provided in this report are taken from results of Census Bureau 2004 estimates and are used to calculate rates of cases per 100,000 children. Data are also provided which explain the source of reports, the home address status for reported cases, the test type utilized for screening, and the frequencies of repeat elevated levels. A comparison for totals of "health department patient" versus "non-health department patient" is provided for each district.

Missing data elements for children have been reduced, but continue to be a concern. Laboratories submitted ninety-four percent of the initial screening reports during 2004. Unfortunately, these same laboratories do not always provide complete data. The major missing variables include the blood test type (unknown = 24%), race (unknown = 27%), and home address (unknown = 5%). The majority of children (86%) received their initial screening by a private physician as opposed to health department staff. Contacting each physician’s office to obtain missing information is difficult and time consuming. As in previous years, assistance from local health departments helped reduce the number of missing elements in the data. Specifically, the work of public health nurses and lead program coordinators is recognized and greatly appreciated in contacting individual physicians for additional information.

This annual report is intended to be a useful resource when addressing concerns about childhood lead exposure in Virginia. Your suggestions for the use of the data or the manner in which it is presented are always welcome. Additional copies of the report can be obtained by visiting the Division of Public Health Toxicology website at www.vdh.virginia.gov/epi/publichealthtoxicology then linking to the Publications page and scrolling down to Reports. Should you have any questions concerning the data, please contact Lala Wilson, Virginia Department of Health, Division of Public Health Toxicology, by phone at (804) 864-8184 or by e-mail at lala.wilson@vdh.virginia.gov..



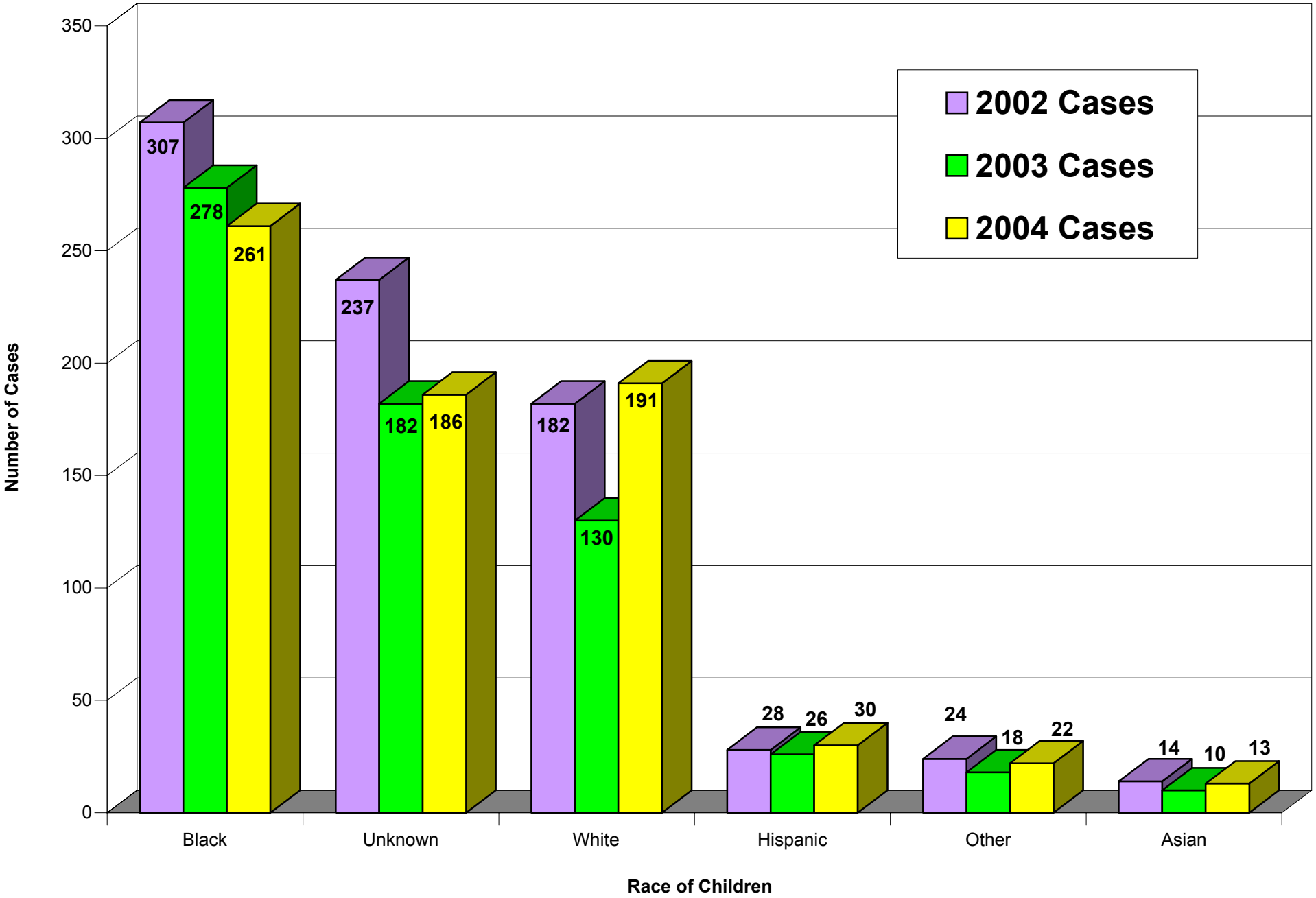
Revisions to the *Regulations for Disease Reporting and Control* effective January 1, 1999, changed the reportable blood lead level for Virginia children from ≥ 15 micrograms per deciliter (µg/dL) to ≥ 10 µg/dL. Blood lead levels between 10 and 14 µg/dL that were reported voluntarily prior to 1999 are reflected in these data. The mean yearly total is 712 with a standard deviation of 86.2.

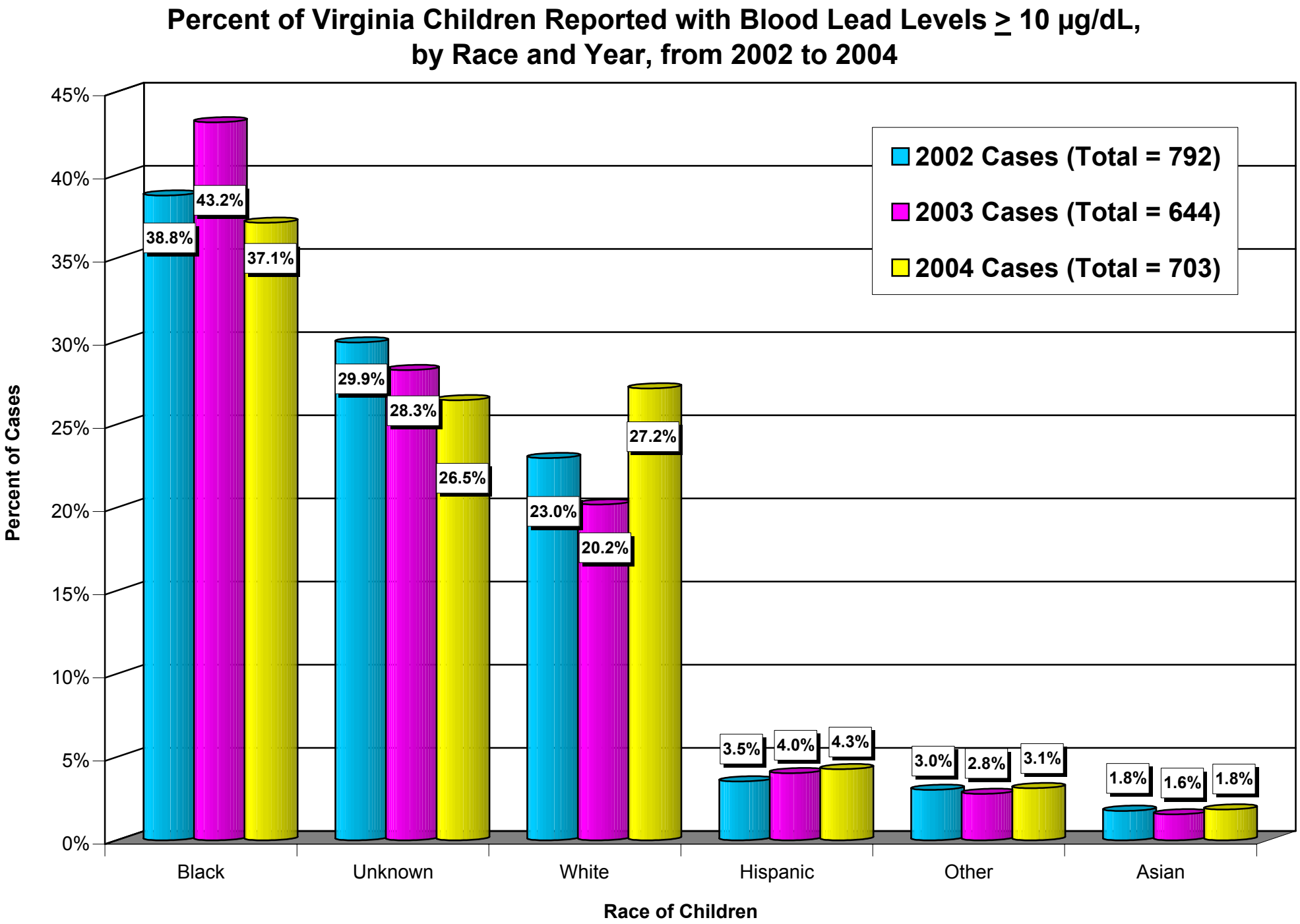
Number of Virginia Children Reported with Blood Lead Levels ≥ 10 µg/dL, by Race, from 2002 to 2004

RACE	2002 Cases	2003 Cases	2004 Cases	Total Cases 2002-2004	Percent of 3-Year Total
Black	307	278	261	846	39.6%
Unknown	237	182	186	605	28.3%
White	182	130	191	503	23.5%
Hispanic	28	26	30	84	3.9%
Other	24	18	22	64	3.0%
Asian	14	10	13	37	1.7%
Total	792	644	703	2139	100.0%

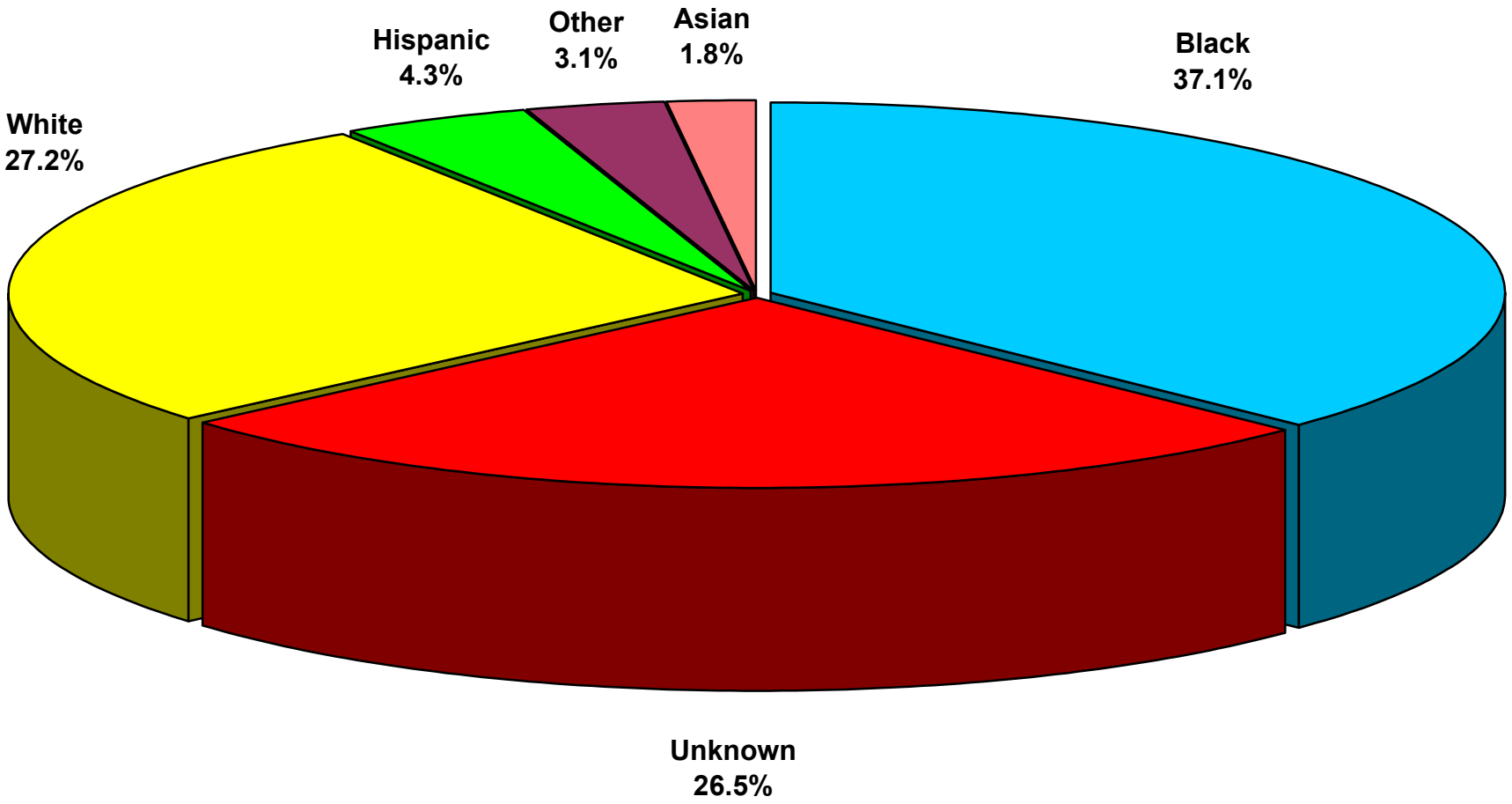
The above data represent new cases of Virginia children reported from 2002 to 2004 with blood lead levels greater than or equal to 10 micrograms per deciliter (≥ 10 µg/dL). The data are a comparison of the children by race. The majority of cases in all three years were reported as black.

Number of Virginia Children Reported with Blood Lead Levels ≥ 10 µg/dL, by Race and Year, from 2002 to 2004




Percent of Virginia Children Reported with Blood Lead Levels ≥ 10 µg/dL, by Race and Year, from 2002 to 2004
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
Percent of Cases
2002 Cases (Total = 792)
2003 Cases (Total = 644)
2004 Cases (Total = 703)
38.8%
43.2%
37.1%
29.9%
28.3%
26.5%
23.0%
20.2%
27.2%
3.5%
4.0%
4.3%
3.0%
2.8%
3.1%
1.8%
1.6%
1.8%
Black
Unknown
White
Hispanic
Other
Asian
Race of Children

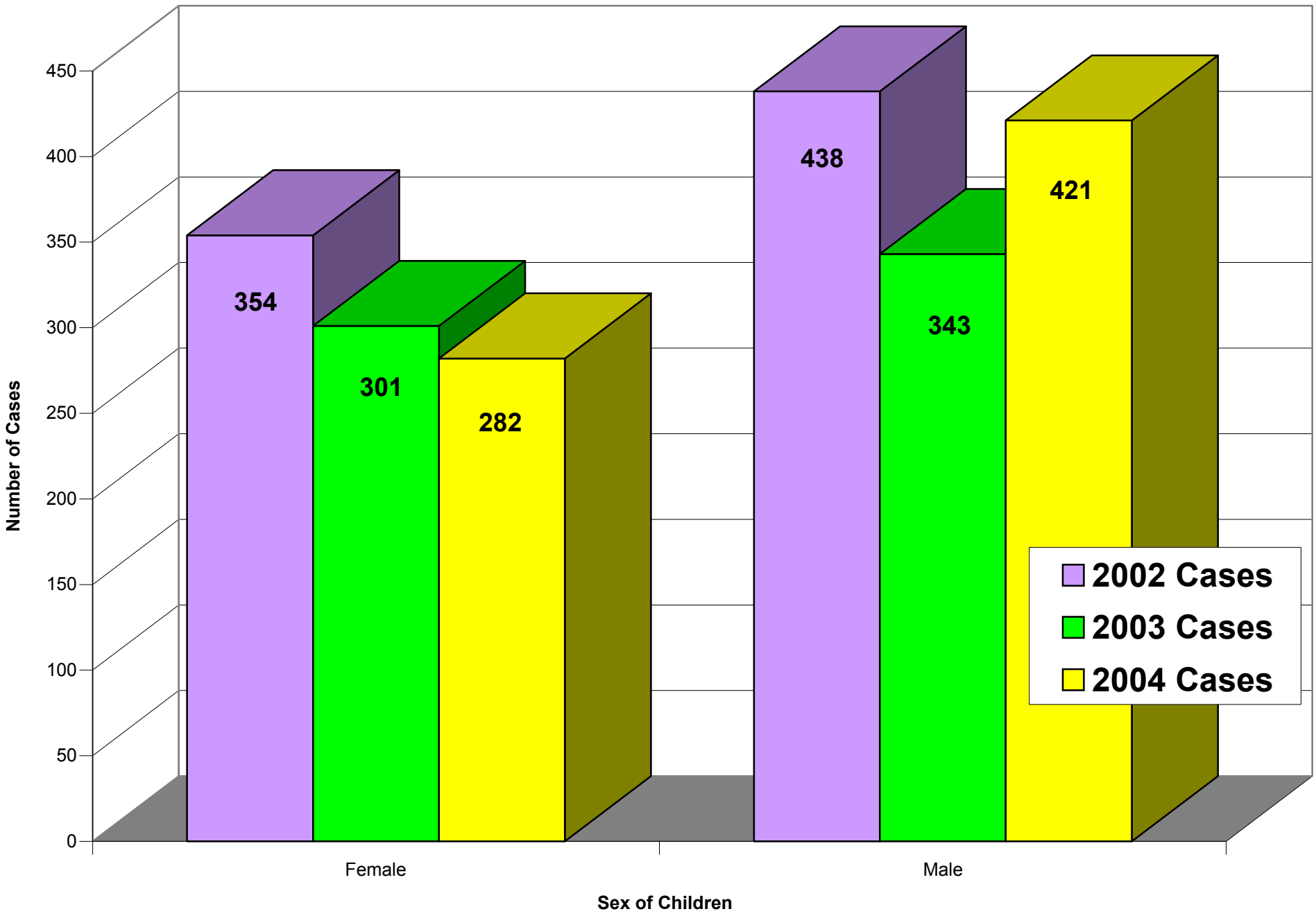
Virginia Children Reported with Blood Lead Levels ≥ 10 µg/dL, by Race, for 2004



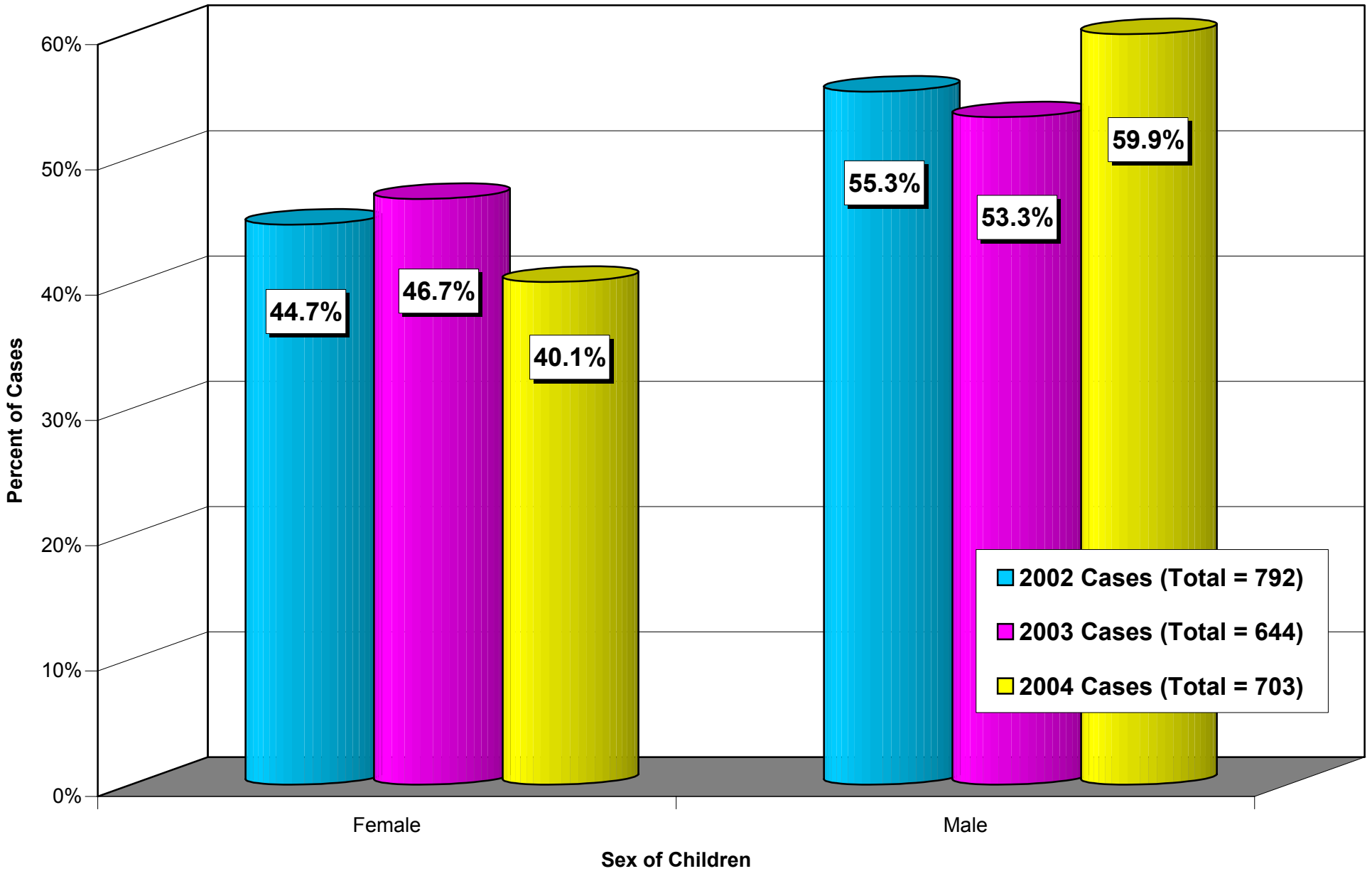
Number of Virginia Children Reported with Blood Lead Levels ≥ 10 µg/dL, by Sex, from 2002 to 2004

SEX	2002 Cases	2003 Cases	2004 Cases	Total Cases 2002-2004	Percent of 3-Year Total
Female	354	301	282	937	43.8%
Male	438	343	421	1202	56.2%
Total	792	644	703	2139	100.0%

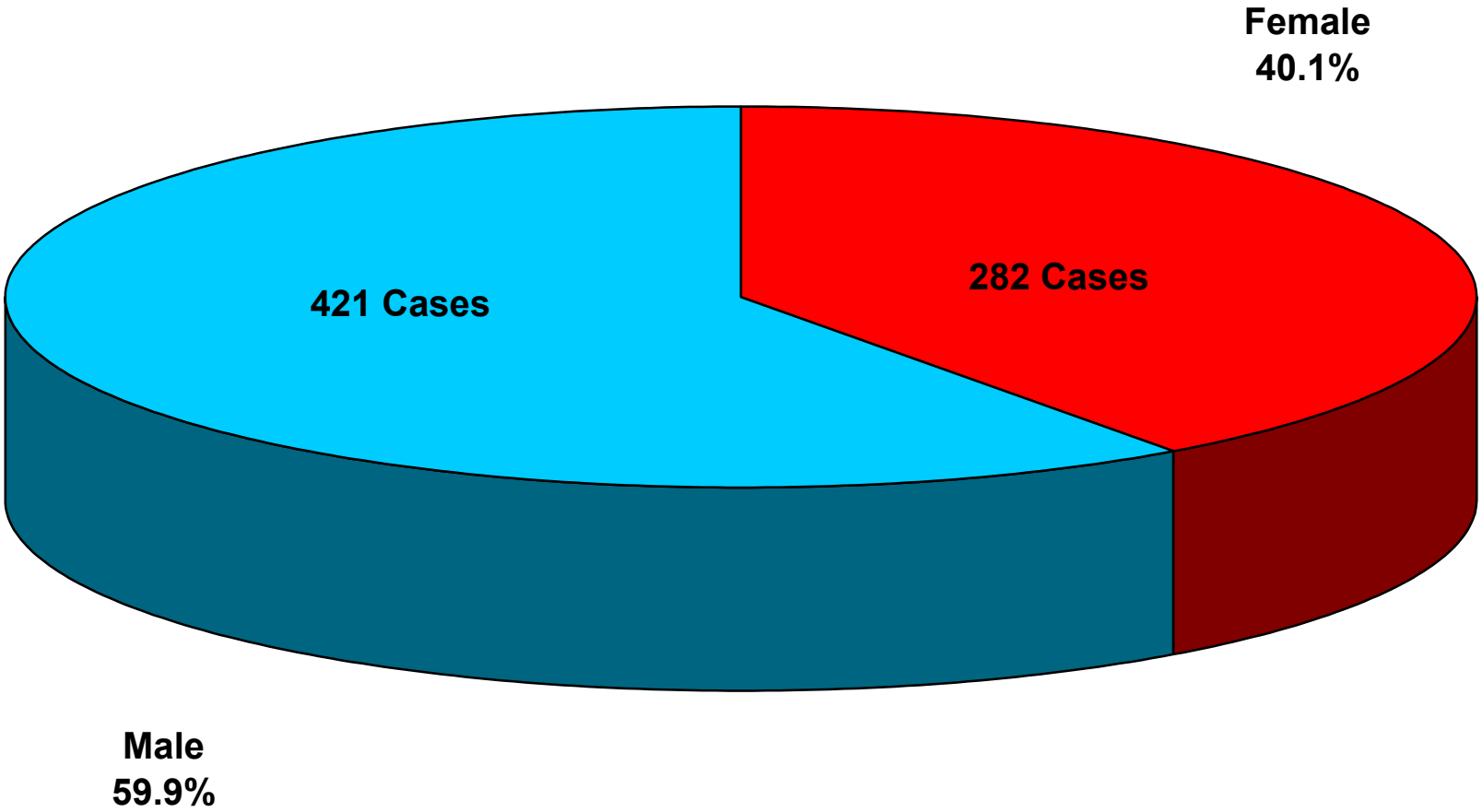
The above data represent new cases of Virginia children reported from 2002 to 2004 with blood lead levels greater than or equal to 10 micrograms per deciliter (≥ 10 µg/dL). The data are a comparison of the children by sex. The majority of cases in all three years were reported as male.


Number of Virginia Children Reported with Blood Lead Levels ≥ 10 µg/dL, by Sex and Year, from 2002 to 2004
450
400
350
300
250
200
150
100
50
0
Number of Cases
354
301
282
438
343
421
2002 Cases
2003 Cases
2004 Cases
Female
Male
Sex of Children

Percent of Virginia Children Reported with Blood Lead Levels ≥ 10 µg/dL, by Sex and Year, from 2002 to 2004



Virginia Children Reported with Blood Lead Levels ≥ 10 µg/dL, by Sex, for 2004

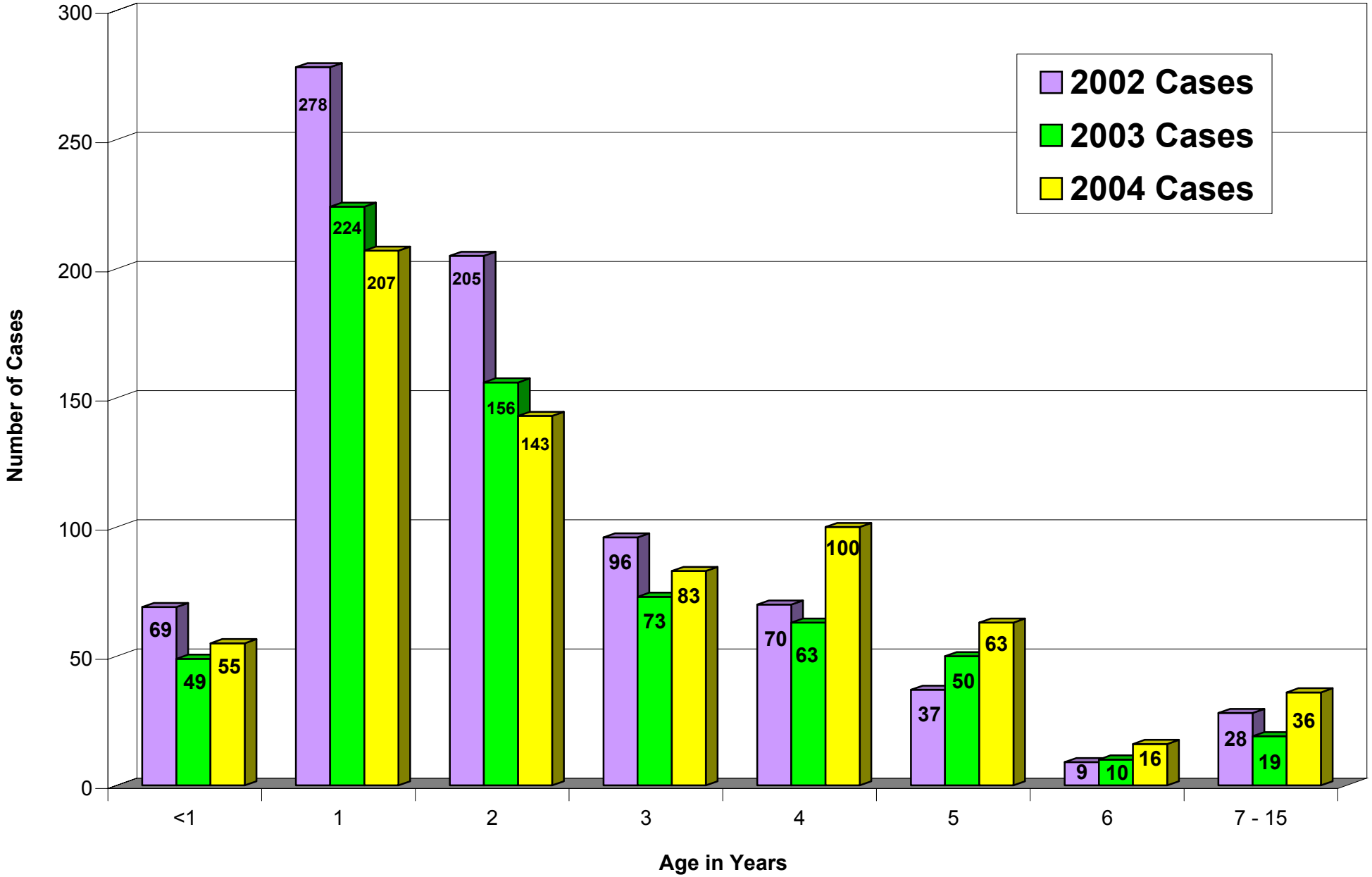


Number of Virginia Children Reported with Blood Lead Levels ≥ 10 µg/dL, by Age, from 2002 to 2004

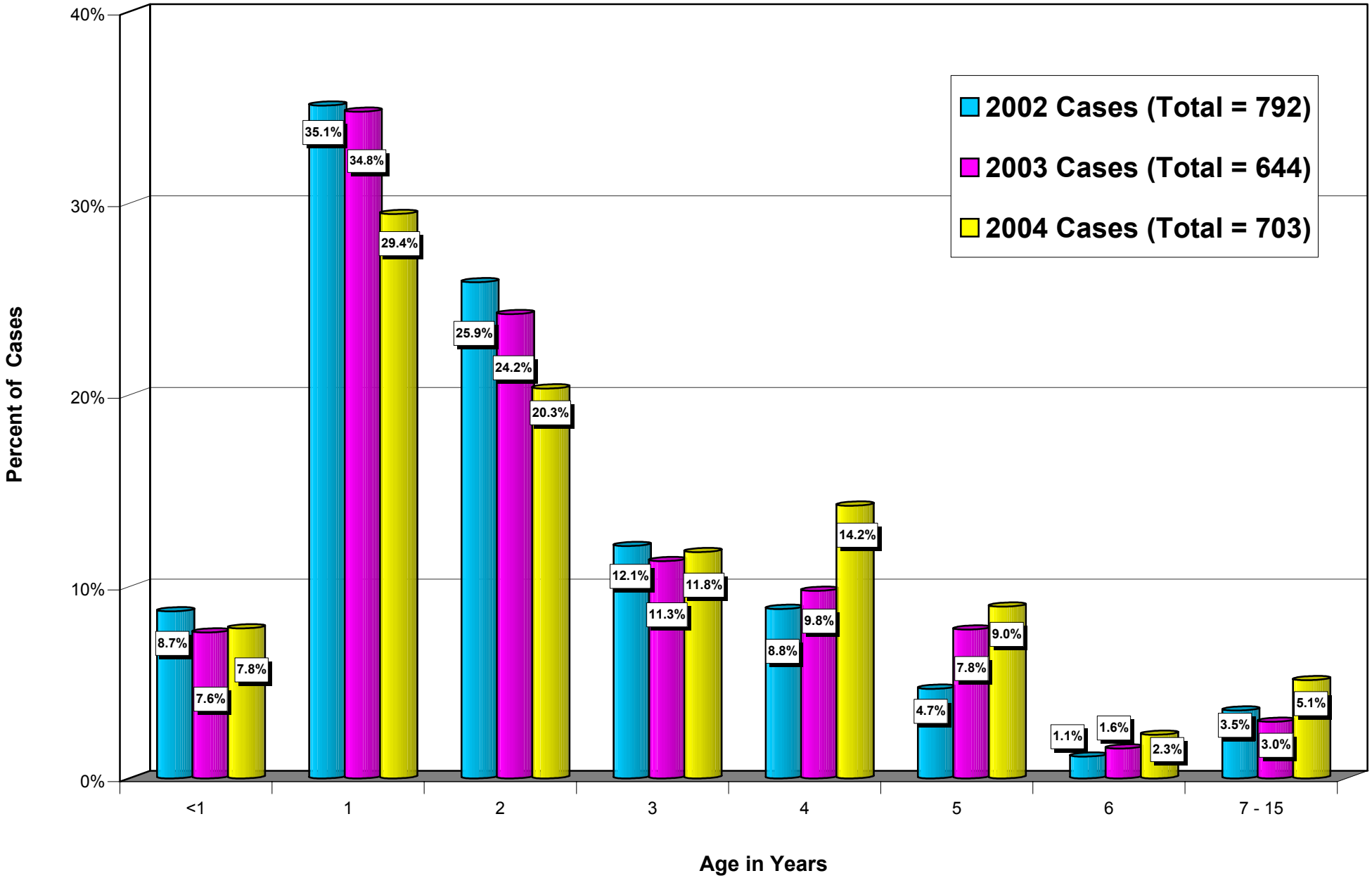
AGE (YEARS)	2002 Cases	2003 Cases	2004 Cases	Total Cases 2002-2004	Percent of 3-Year Total
<1	69	49	55	173	8.1%
1	278	224	207	709	33.1%
2	205	156	143	504	23.6%
3	96	73	83	252	11.8%
4	70	63	100	233	10.9%
5	37	50	63	150	7.0%
6	9	10	16	35	1.6%
7	9	5	14	28	1.3%
8	2	4	7	13	0.6%
9	2	2	5	9	0.4%
10	8	2	1	11	0.5%
11	1	1	2	4	0.2%
12	2	1	4	7	0.3%
13	2	2	1	5	0.2%
14	0	1	1	2	0.1%
15	2	1	1	4	0.2%
Total	792	644	703	2139	100.0%

The above data represent new cases of Virginia children reported from 2002 to 2004 with blood lead levels greater than or equal to 10 micrograms per deciliter (≥ 10 µg/dL). The data are a comparison of the children by age up to fifteen years. Age one was the most frequently reported age for each year. The mean age reported in 2004 was 2.7 with a standard deviation of 2.2 and a standard error of 0.1.

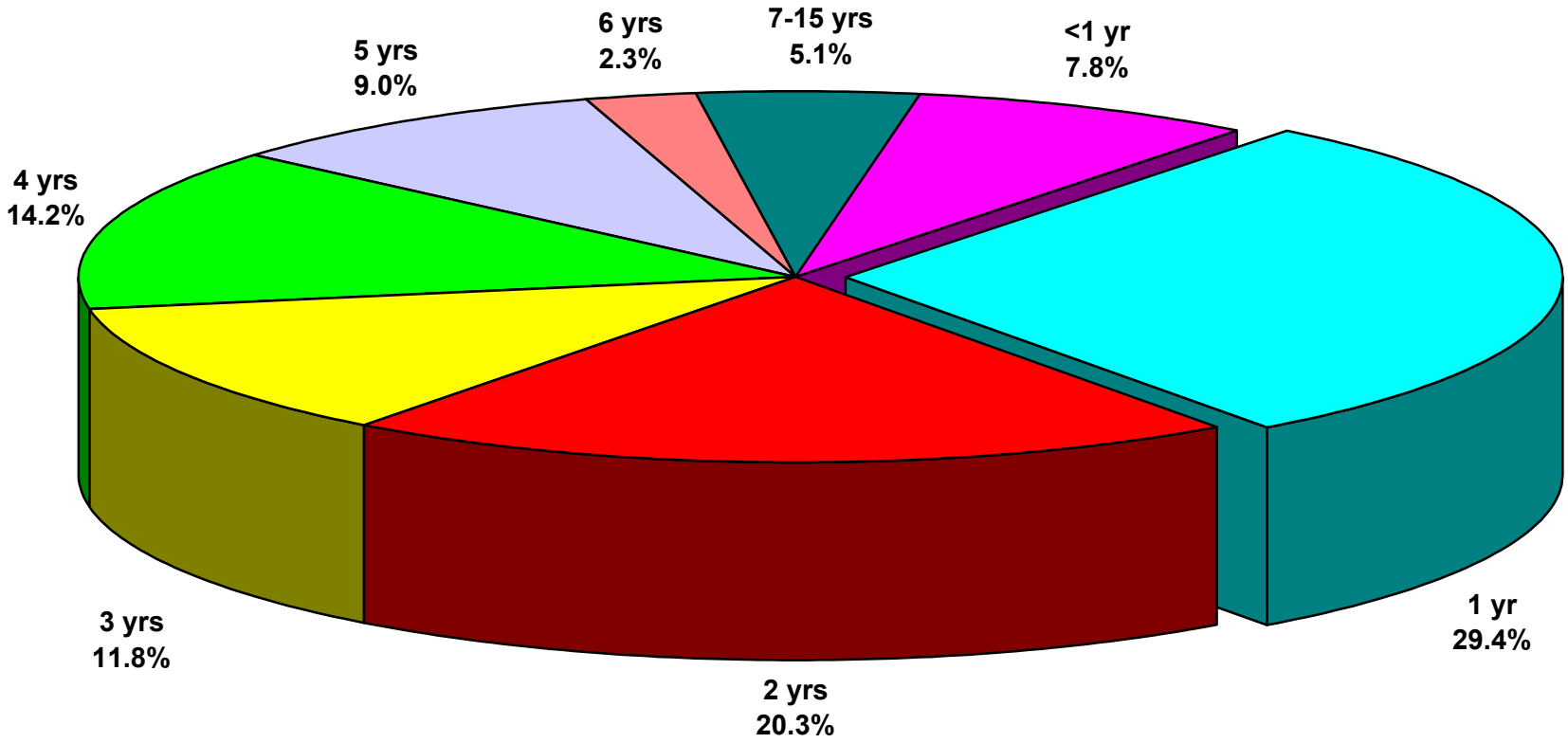
Number of Virginia Children Reported with Blood Lead Levels ≥ 10 µg/dL, by Age and Year, from 2002 to 2004



Percent of Virginia Children Reported with Blood Lead Levels ≥ 10 µg/dL, by Age and Year, from 2002 to 2004



Virginia Children Reported with Blood Lead Levels ≥ 10 µg/dL, by Age, for 2004

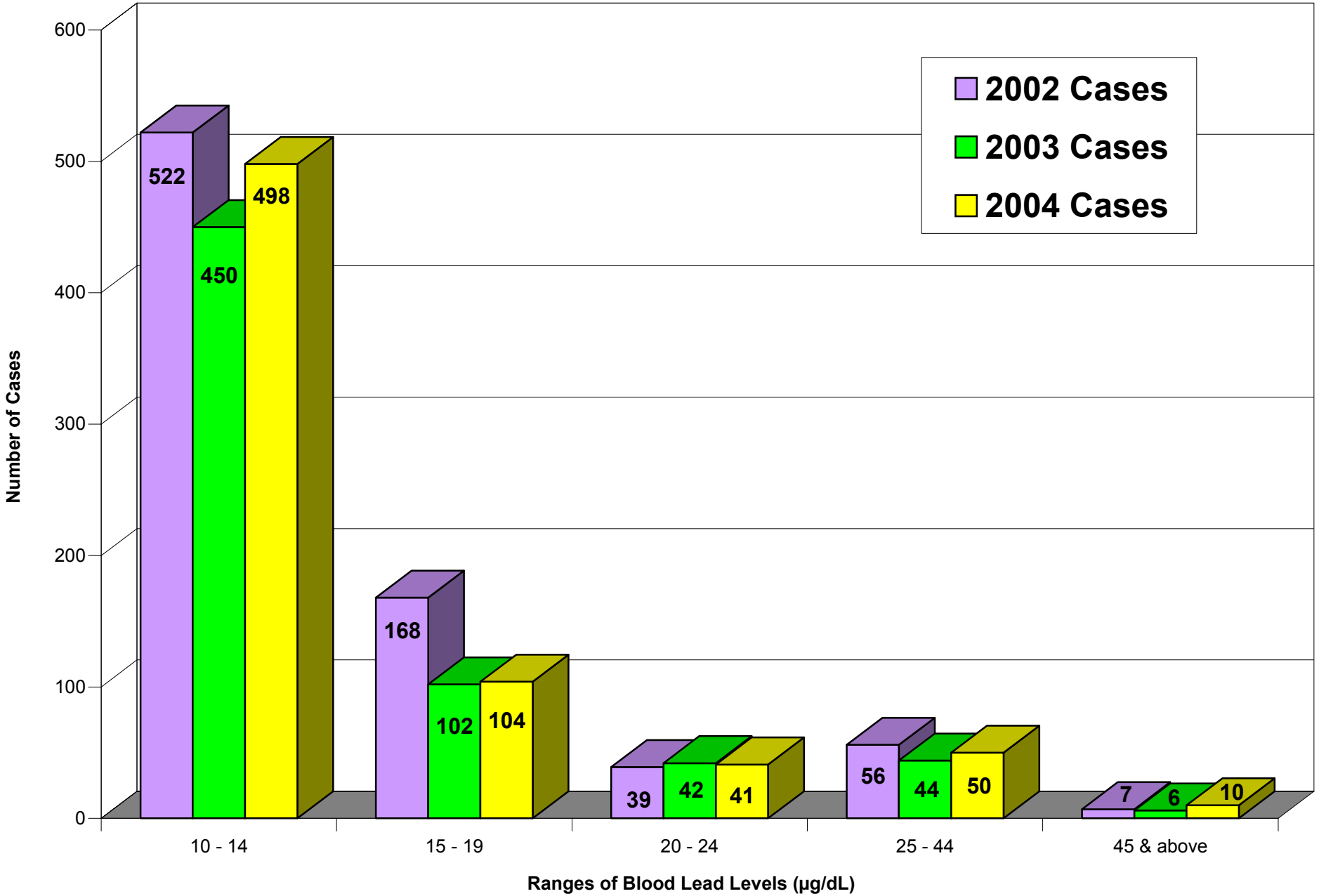


Number of Virginia Children Reported with Blood Lead Levels ≥ 10 µg/dL, by Range of Elevation, from 2002 to 2004

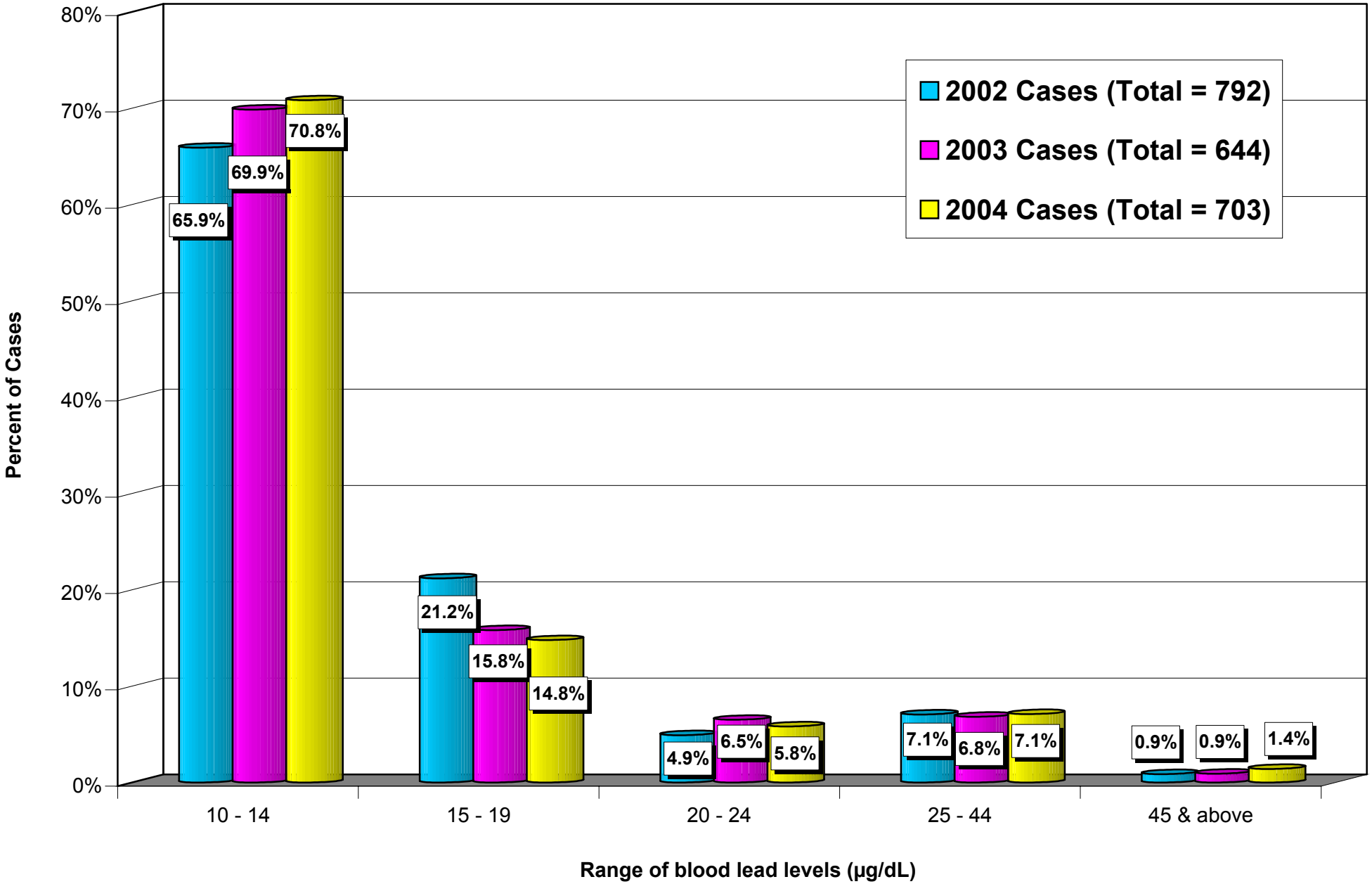
Range (µg/dL)	2002 Cases	2003 Cases	2004 Cases	Total Cases 2002-2004	Percent of 3-Year Total
10 - 14	522	450	498	1470	68.7%
15 - 19	168	102	104	374	17.5%
20 - 24	39	42	41	122	5.7%
25 - 44	56	44	50	150	7.0%
45 & above	7	6	10	23	1.1%
Total	792	644	703	2139	100.0%

The above data represent new cases of Virginia children reported from 2002 to 2004 with blood lead levels greater than or equal to 10 micrograms per deciliter (≥ 10 µg/dL). The data are a comparison of the children by ranges of elevated blood lead levels. The mean blood lead level reported in 2004 was 14.8 with a standard deviation of 7.8 and a standard error of 0.3.

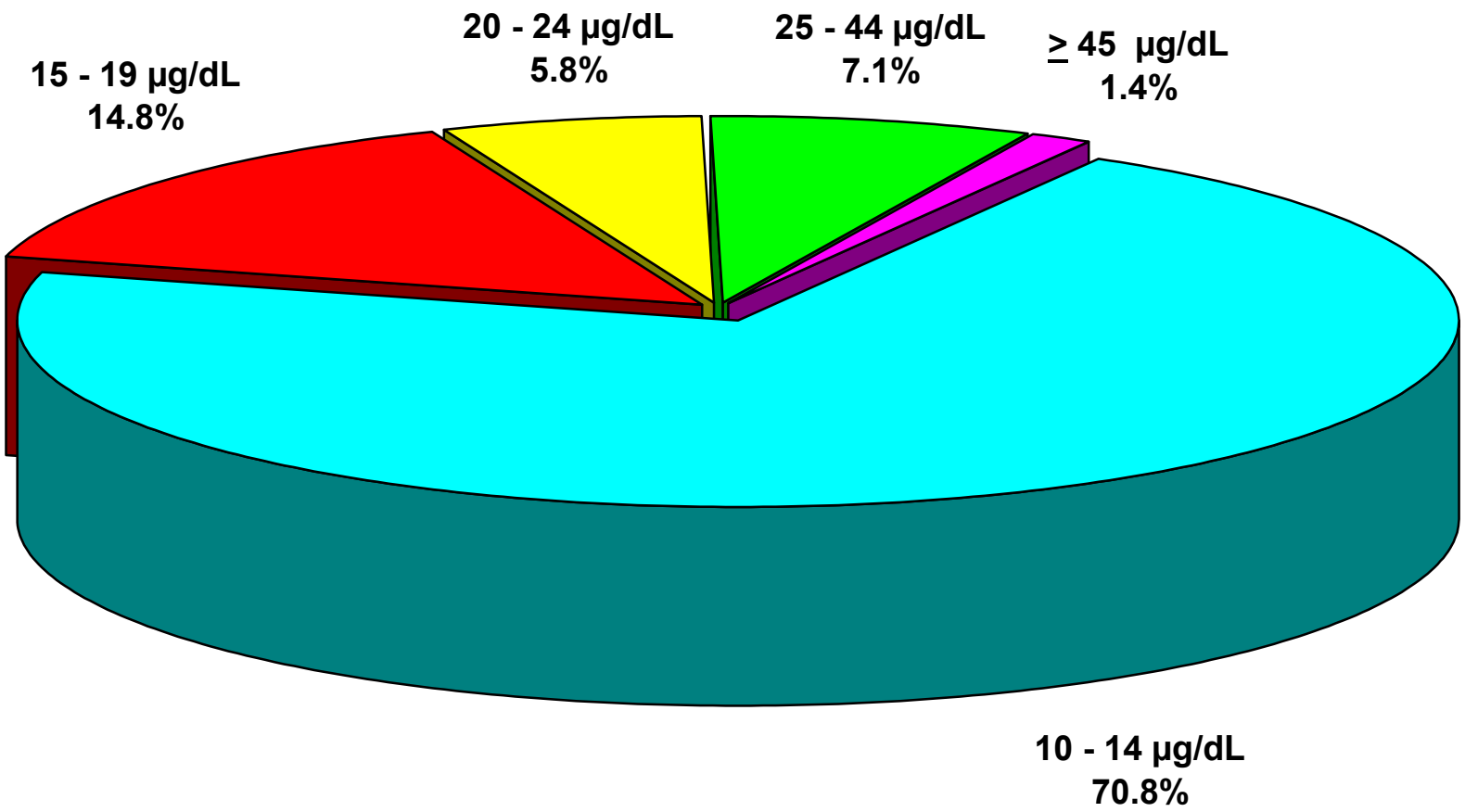
Number of Virginia Children Reported with Blood Lead Levels ≥ 10 µg/dL, by Range of Elevation and Year, from 2002 to 2004



Percent of Virginia Children Reported with Blood Lead Levels ≥ 10 µg/dL, by Range of Elevation and Year, from 2002 to 2004



Virginia Children Reported with Blood Lead Levels ≥ 10 µg/dL, by Range of Elevation, for 2004



Number of Reported Cases of Elevated Blood Lead Levels for Virginia Children, by Health District, from 2002 to 2004

HEALTH DISTRICT	2002 Cases	2003 Cases	2004 Cases	2002 -2004 Cases	Percent of 3-yr Total
ALEXANDRIA	7	2	7	16	0.7%
ALLEGHANY	12	2	12	26	1.2%
ARLINGTON	15	8	12	35	1.6%
CENTRAL SHENANDOAH	38	19	37	94	4.4%
CENTRAL VIRGINIA	42	31	27	100	4.7%
CHESAPEAKE	9	8	8	25	1.2%
CHESTERFIELD	11	12	16	39	1.8%
CRATER	55	30	27	112	5.2%
CUMBERLAND PLATEAU	13	6	9	28	1.3%
EASTERN SHORE	49	19	16	84	3.9%
FAIRFAX	54	34	60	148	6.9%
HAMPTON	8	9	7	24	1.1%
HANOVER	5	4	8	17	0.8%
HENRICO	11	18	22	51	2.4%
LENOWISCO	0	6	4	10	0.5%
LORD FAIRFAX	5	8	23	36	1.7%
LOUDOUN	10	3	3	16	0.7%
MOUNT ROGERS	8	8	11	27	1.3%
NEW RIVER	5	8	4	17	0.8%
NORFOLK	45	44	28	117	5.5%
PENINSULA	23	18	16	57	2.7%
PIEDMONT	15	19	16	50	2.3%
PITTSYLVANIA/DANVILLE	10	21	28	59	2.8%
PORTSMOUTH	22	11	14	47	2.2%
PRINCE WILLIAM	9	5	6	20	0.9%
RAPPAHANNOCK	14	17	21	52	2.4%
RAPPAHANNOCK/RAPIDAN	4	3	4	11	0.5%
RICHMOND CITY	169	187	137	493	23.0%
ROANOKE CITY	44	22	36	102	4.8%
SOUTHSIDE	14	11	16	41	1.9%
THOMAS JEFFERSON	9	5	14	28	1.3%
THREE RIVERS	22	13	17	52	2.4%
VIRGINIA BEACH	4	3	8	15	0.7%
WEST PIEDMONT	10	11	6	27	1.3%
WESTERN TIDEWATER	21	19	23	63	2.9%
Total	792	644	703	2139	100.0%

Number of Reported Cases of Elevated Blood Lead Levels for Virginia Children, by Locality, from 2002 to 2004

Locality Name	2002 Cases	2003 Cases	2004 Cases	2002-2004 Cases	Percent of 3-year total
Accomack Co	32	9	7	48	2.2%
Albemarle Co/Charlottesville	4	3	7	14	0.7%
Alexandria	7	2	7	16	0.7%
Alleghany Co/Covington/Clifton Forge	5	0	2	7	0.3%
Amelia Co	1	1	1	3	0.1%
Amherst Co	7	2	4	13	0.6%
Appomattox Co	1	2	1	4	0.2%
Arlington Co	15	8	12	35	1.6%
Augusta Co/Staunton	17	6	10	33	1.5%
Bath Co	0	0	0	0	0.0%
Bedford Co/Bedford	3	0	4	7	0.3%
Bland Co	0	0	0	0	0.0%
Botetourt Co	0	0	5	5	0.2%
Bristol	1	0	2	3	0.1%
Brunswick Co	4	3	2	9	0.4%
Buchanan Co	2	2	3	7	0.3%
Buckingham Co	1	4	3	8	0.4%
Buena Vista	0	0	0	0	0.0%
Campbell Co	5	7	3	15	0.7%
Caroline Co	4	8	8	20	0.9%
Carroll Co	0	0	0	0	0.0%
Charles City Co	0	0	1	1	0.0%
Charlotte Co	4	1	1	6	0.3%
Chesapeake	9	8	8	25	1.2%
Chesterfield Co	7	8	12	27	1.3%
Clarke Co	0	0	2	2	0.1%
Colonial Heights	1	2	3	6	0.3%
Craig Co	1	0	1	2	0.1%
Culpeper Co	3	1	1	5	0.2%
Cumberland Co	0	1	2	3	0.1%
Danville	8	15	22	45	2.1%
Dickenson Co	0	0	0	0	0.0%
Dinwiddie Co	3	1	2	6	0.3%
Essex Co	3	2	3	8	0.4%
Fairfax Co/Fairfax/Falls Church	54	34	60	148	6.9%
Fauquier Co	1	1	1	3	0.1%
Floyd Co	1	0	1	2	0.1%
Fluvanna Co	0	1	0	1	0.0%
Franklin City	2	1	0	3	0.1%

Locality Name	2002 Cases	2003 Cases	2004 Cases	2002-2004 Cases	Percent of 3-year total
Franklin Co	0	3	0	3	0.1%
Frederick Co/Winchester	2	5	13	20	0.9%
Fredericksburg	6	6	8	20	0.9%
Galax	0	1	2	3	0.1%
Giles Co	0	0	1	1	0.0%
Gloucester Co	0	0	0	0	0.0%
Goochland Co	2	0	1	3	0.1%
Grayson Co	1	0	1	2	0.1%
Greene Co	0	0	1	1	0.0%
Greensville Co/Emporia	1	3	1	5	0.2%
Halifax Co/South Boston	9	3	5	17	0.8%
Hampton	8	9	7	24	1.1%
Hanover Co	2	3	2	7	0.3%
Henrico Co	11	18	22	51	2.4%
Henry Co/Martinsville	8	6	5	19	0.9%
Highland Co	0	0	0	0	0.0%
Hopewell	7	5	4	16	0.7%
Isle of Wight Co	2	0	4	6	0.3%
James City Co	0	0	0	0	0.0%
King and Queen Co	0	1	1	2	0.1%
King George Co	1	1	4	6	0.3%
King William Co	3	0	1	4	0.2%
Lancaster Co	2	2	3	7	0.3%
Lee Co	0	1	1	2	0.1%
Loudoun Co	10	3	3	16	0.7%
Louisa Co	1	1	4	6	0.3%
Lunenburg Co	2	1	4	7	0.3%
Lynchburg	26	20	15	61	2.9%
Madison Co	0	1	0	1	0.0%
Mathews Co	1	0	3	4	0.2%
Mecklenburg Co	1	5	9	15	0.7%
Middlesex Co	2	2	0	4	0.2%
Montgomery Co	1	3	1	5	0.2%
Nelson Co	4	0	2	6	0.3%
New Kent Co	1	1	4	6	0.3%
Newport News	16	17	13	46	2.2%
Norfolk	45	44	28	117	5.5%
Northampton Co	17	10	9	36	1.7%
Northumberland Co	5	2	2	9	0.4%
Nottoway Co	5	4	2	11	0.5%
Orange Co	0	0	2	2	0.1%
Page Co	1	0	1	2	0.1%
Patrick Co	2	2	1	5	0.2%
Petersburg	40	18	12	70	3.3%

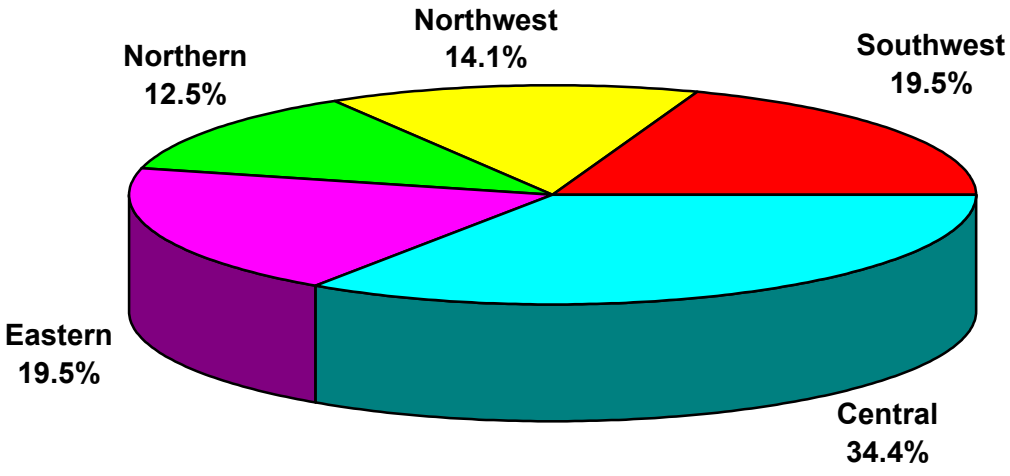
Locality Name	2002 Cases	2003 Cases	2004 Cases	2002-2004 Cases	Percent of 3-year total
Pittsylvania Co	2	6	6	14	0.7%
Portsmouth	22	11	14	47	2.2%
Powhatan Co	3	2	1	6	0.3%
Prince Edward Co	2	7	3	12	0.6%
Prince George Co	1	2	3	6	0.3%
Prince William Co/Manassas	9	5	6	20	0.9%
Pulaski Co	1	4	1	6	0.3%
Radford	2	1	0	3	0.1%
Rappahannock Co	0	0	0	0	0.0%
Richmond City	169	187	137	493	23.0%
Richmond Co	3	3	1	7	0.3%
Roanoke City	44	22	36	102	4.8%
Roanoke Co	0	0	3	3	0.1%
Rockbridge Co/Lexington	2	1	2	5	0.2%
Rockingham Co/Harrisonburg	14	8	12	34	1.6%
Russell Co	2	3	4	9	0.4%
Salem	6	2	1	9	0.4%
Scott Co	0	4	2	6	0.3%
Shenandoah Co	1	1	2	4	0.2%
Smyth Co	0	4	1	5	0.2%
Southampton Co	0	1	2	3	0.1%
Spotsylvania Co	0	2	0	2	0.1%
Stafford Co	3	0	1	4	0.2%
Suffolk	17	17	17	51	2.4%
Surry Co	0	1	2	3	0.1%
Sussex Co	3	0	3	6	0.3%
Tazewell Co	9	1	2	12	0.6%
Virginia Beach	4	3	8	15	0.7%
Warren Co	1	2	5	8	0.4%
Washington Co	2	0	0	2	0.1%
Waynesboro	5	4	13	22	1.0%
Westmoreland Co	3	1	3	7	0.3%
Williamsburg	4	1	1	6	0.3%
Wise Co/Norton	0	1	1	2	0.1%
Wythe Co	4	3	5	12	0.6%
York Co/Poquoson	3	0	2	5	0.2%
Total	792	644	703	2139	100.0%

Number of Reported Cases of Childhood Elevated Blood Lead Levels in Virginia, by Region, from 2002 to 2004

Region	2002 Cases	2003 Cases	2004 Cases	2002-2004 Cases	Percent of 3-year total
Central	242	279	242	763	35.1%
Eastern	191	203	137	531	24.5%
Northern	72	95	88	255	11.7%
Northwest	46	70	99	215	9.9%
Southwest	127	143	137	407	18.7%
Total	678	790	703	2171	100.0%

The above data represent cases of Virginia children reported in all five health planning regions in the state. The Central Region data reveal the most cases in all three years. This region includes the City of Richmond, which historically reports the most cases by locality each year.

Percent of Reported Cases of Childhood Elevated Blood Lead Levels in Virginia, by Region, for 2004



Number of Reported Cases and Rate per 100,000 Population for Virginia Children, Age 0 - 14 With Blood Lead Levels ≥ 10 µg/dL, by Health District, for 2004

HEALTH DISTRICT	Population Total* Age 0 to 14	2004 Reported Cases**	Rate per 100,000
ALEXANDRIA	22,896	7	30.6
ALLEGHANY	29,962	12	40.1
ARLINGTON	29,437	12	40.8
CENTRAL SHENANDOAH	45,987	37	80.5
CENTRAL VIRGINIA	42,537	27	63.5
CHESAPEAKE	47,035	8	17.0
CHESTERFIELD	67,396	16	23.7
CRATER	29,198	27	92.5
CUMBERLAND PLATEAU	19,051	9	47.2
EASTERN SHORE	10,017	16	159.7
FAIRFAX	218,228	59	27.0
HAMPTON	28,900	7	24.2
HANOVER	26,442	8	30.3
HENRICO	56,947	22	38.6
LENOWISCO	15,832	4	25.3
LORD FAIRFAX	38,588	23	59.6
LOUDOUN	59,785	3	5.0
MOUNT ROGERS	31,910	11	34.5
NEW RIVER	24,525	4	16.3
NORFOLK	51,311	28	54.6
PENINSULA	69,338	16	23.1
PIEDMONT	17,000	16	94.1
PITTSYLVANIA/DANVILLE	19,679	28	142.3
PORTSMOUTH	21,933	14	63.8
PRINCE WILLIAM	96,545	6	6.2
RAPPAHANNOCK	65,199	21	32.2
RAPPAHANNOCK/RAPIDAN	29,461	4	13.6
RICHMOND CITY	37,773	137	362.7
ROANOKE CITY	18,297	36	196.8
SOUTHSIDE	15,105	16	105.9
THOMAS JEFFERSON	38,112	14	36.7
THREE RIVERS	23,814	17	71.4
VIRGINIA BEACH	97,764	8	8.2
WEST PIEDMONT	24,428	6	24.6
WESTERN TIDEWATER	27,628	23	83.2
Total	1,498,060	702	46.9

* Population totals based on 2004 estimates from the Census Bureau.

**Age 15 years data (n=1) excluded from total cases.

Number of Reported Cases and Rate per 100,000 Population for Virginia Children, Age 0 - 14 With Blood Lead Levels ≥ 10 µg/dL, by Locality, for 2004

Locality	Population Total* Age 0 to 14	2004 Reported Cases**	Rate per 100,000
Accomack County	7603	7	92.1
Albemarle County/Charlottesville	21786	7	32.1
Alexandria City	22896	7	30.6
Alleghany County/Clifton Forge/Covington	4072	2	49.1
Amelia County	2287	1	43.7
Amherst County	5694	4	70.2
Appomattox County	2580	1	38.8
Arlington County	29437	12	40.8
Augusta County/Staunton	16029	10	62.4
Bath County	730	0	0.0
Bedford County/Bedford	12503	4	32.0
Bland County	988	0	0.0
Botetourt County	5421	5	92.2
Bristol City	2888	2	69.3
Brunswick County	2859	2	70.0
Buchanan County	4016	3	74.7
Buckingham County	2591	3	115.8
Buena Vista City	1127	0	0.0
Campbell County	9766	3	30.7
Caroline County	4663	8	171.6
Carroll County	4977	0	0.0
Charles City County	1170	1	85.5
Charlotte County	2306	1	43.4
Chesapeake City	47035	8	17.0
Chesterfield County	59575	12	20.1
Clarke County	2406	2	83.1
Colonial Heights City	3154	3	95.1
Craig County	925	1	108.1
Culpeper County	8046	1	12.4
Cumberland County	1778	2	112.5
Danville City	8683	22	253.4
Dickenson County	2671	0	0.0
Dinwiddie County	4617	2	43.3
Essex County	1895	3	158.3
Fairfax County/Fairfax/Falls Church	218228	60	27.5
Fauquier County	12648	1	7.9
Floyd County	2534	1	39.5
Fluvanna County	4613	0	0.0

Locality	Population Total* Age 0 to 14	2004 Reported Cases**	Rate per 100,000
Franklin City	1737	0	0.0
Franklin County	8662	0	0.0
Frederick County/Winchester	18164	13	71.6
Fredericksburg City	3758	8	212.9
Galax City	1322	2	151.3
Giles County	3082	1	32.4
Gloucester County	7099	0	0.0
Goochland County	3169	1	31.6
Grayson County	2705	1	37.0
Greene County	3828	1	26.1
Greensville County/Emporia	2740	1	36.5
Halifax County/South Boston	6807	5	73.5
Hampton City	28900	7	24.2
Hanover County	19265	2	10.4
Henrico County	56947	22	38.6
Henry County/Martinsville	12577	5	39.8
Highland County	336	0	0.0
Hopewell City	5145	4	77.7
Isle of Wight County	6224	4	64.3
James City County	9375	0	0.0
King and Queen County	1177	1	85.0
King George County	4188	4	95.5
King William County	2997	1	33.4
Lancaster County	1680	3	178.6
Lee County	4184	1	23.9
Loudoun County	59785	3	5.0
Louisa County	5444	4	73.5
Lunenburg County	1987	4	201.3
Lynchburg City	11994	15	125.1
Madison County	2384	0	0.0
Mathews County	1364	3	219.9
Mecklenburg County	5439	9	165.5
Middlesex County	1480	0	0.0
Montgomery County	11555	1	8.7
Nelson County	2441	2	81.9
New Kent County	2838	4	140.9
Newport News City	44531	13	29.2
Norfolk City	51311	28	54.6
Northampton County	2414	9	372.8
Northumberland County	1873	2	106.8
Nottoway County	2836	2	70.5
Orange County	5174	2	38.7

Locality	Population Total* Age 0 to 14	2004 Reported Cases**	Rate per 100,000
Page County	4244	1	23.6
Patrick County	3189	1	31.4
Petersburg City	7068	12	169.8
Pittsylvania County	10996	6	54.6
Portsmouth City	21933	14	63.8
Powhatan County	4667	1	21.4
Prince Edward County	3215	3	93.3
Prince George County	6504	3	46.1
Prince William County/Manassas/Manassas Park	96545	6	6.2
Pulaski County	5829	1	17.2
Radford City	1525	0	0.0
Rappahannock County	1209	0	0.0
Richmond City	37773	137	362.7
Richmond County	1214	1	82.4
Roanoke City	18297	36	196.8
Roanoke County	15656	3	19.2
Rockbridge County/Lexington	4102	2	48.8
Rockingham County	19457	12	61.7
Russell County	4935	4	81.1
Salem City	3888	1	25.7
Scott County	3706	2	54.0
Shenandoah County	6746	2	29.6
Smyth County	5593	1	17.9
Southampton County	2903	2	68.9
Spotsylvania County	25600	0	0.0
Stafford County	26990	1	3.7
Suffolk City	16764	17	101.4
Surry County	1279	2	156.4
Sussex County	1845	3	162.6
Tazewell County	7429	2	26.9
Virginia Beach City	97764	8	8.2
Warren County	7028	5	71.1
Washington County	8503	0	0.0
Waynesboro City	4206	13	309.1
Westmoreland County	3035	3	98.8
Williamsburg City	1010	1	99.0
Wise County/Norton	7942	1	12.6
Wythe County	4934	5	101.3
York County/Poquoson	14422	2	13.9
Total	1498060	703	46.9

* Population totals based on 2004 estimates from the Census Bureau.

**Age 15 years data (n=1) excluded from total cases.

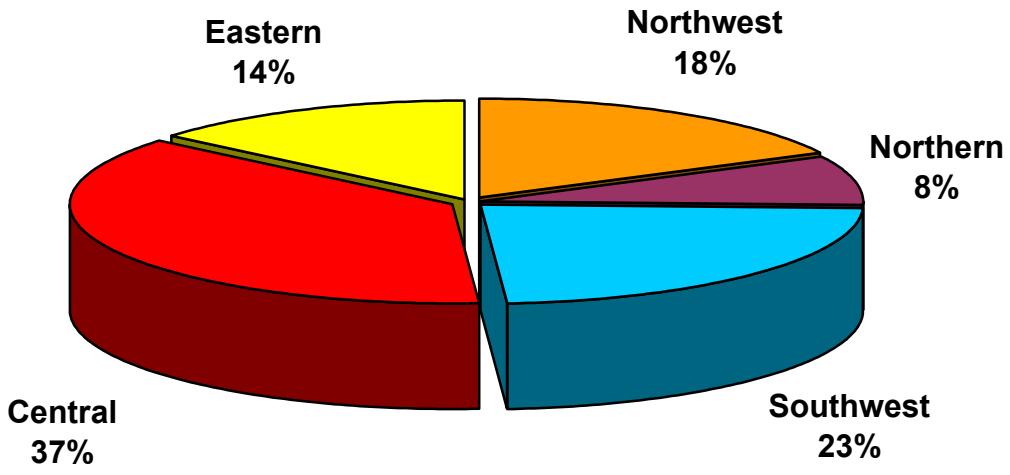
Number of Reported Cases and Rate per 100,000 Population for Virginia Children, Age 0 - 14 With Blood Lead Levels ≥ 10 µg/dL, by Health Planning Region, for 2004

Planning Region	Population Total* Age 0 to 14	2004 Reported Cases**	Rate per 100,000
Northwest	217347	99	45.5
Northern	426891	88	20.6
Southwest	226221	137	60.6
Central	249861	242	96.9
Eastern	377740	137	36.3
Total	1498060	703	46.9

* Population totals based on 2004 estimates from the Census Bureau.

**Age 15 years data (n=1) excluded from total cases.

Percent of Rate per 100,000 Population for Virginia Children, Age 0 - 14 With Blood Lead Levels > 10 µg/dL, by Health Planning Region, 2004



Number of Reported Cases of Elevated Blood Lead Levels for Virginia Children, by Health District and Age, for 2004

	AGE IN YEARS								
DISTRICT	<1	1	2	3	4	5	6	7 - 15	Total
ALEXANDRIA	0	3	0	2	1	1	0	0	7
ALLEGHANY	1	4	0	2	1	2	1	1	12
ARLINGTON	1	4	3	0	4	0	0	0	12
CENTRAL SHENANDOAH	1	17	8	2	5	2	1	1	37
CENTRAL VIRGINIA	4	10	9	2	1	0	0	1	27
CHESAPEAKE	0	2	0	2	2	1	0	1	8
CHESTERFIELD	1	4	3	1	2	1	0	4	16
CRATER	1	6	1	5	9	4	0	1	27
CUMBERLAND PLATEAU	0	1	4	3	1	0	0	0	9
EASTERN SHORE	1	8	6	0	0	0	0	1	16
FAIRFAX	9	8	8	8	9	8	1	9	60
HAMPTON	0	2	1	3	0	0	0	1	7
HANOVER	0	2	4	0	0	0	0	2	8
HENRICO	0	12	4	0	3	1	2	0	22
LENOWISCO	0	1	1	0	1	1	0	0	4
LORD FAIRFAX	3	4	2	3	6	4	0	1	23
LOUDOUN	0	0	0	0	0	0	2	1	3
MOUNT ROGERS	2	1	1	1	2	3	1	0	11
NEW RIVER	0	1	0	0	1	0	1	1	4
NORFOLK	1	9	8	4	3	2	0	1	28
PENINSULA	0	5	2	2	2	3	0	2	16
PIEDMONT	0	2	5	4	2	2	0	1	16
PITTSYLVANIA/DANVILLE	8	2	10	3	2	3	0	0	28
PORTSMOUTH	0	7	0	4	3	0	0	0	14
PRINCE WILLIAM	0	2	1	0	0	2	0	1	6
RAPPAHANNOCK	2	4	5	0	4	4	1	1	21
RAPPAHANNOCK/RAPIDAN	0	1	1	1	1	0	0	0	4
RICHMOND CITY	7	44	30	20	20	10	3	3	137
ROANOKE CITY	3	13	7	4	4	4	1	0	36
SOUTHSIDE	0	6	5	0	3	1	0	1	16
THOMAS JEFFERSON	3	4	3	1	2	1	0	0	14
THREE RIVERS	3	5	1	3	4	1	0	0	17
VIRGINIA BEACH	2	2	1	0	0	1	1	1	8
WEST PIEDMONT	1	3	1	0	1	0	0	0	6
WESTERN TIDEWATER	1	8	8	3	1	1	1	0	23
Total	55	207	143	83	100	63	16	36	703

Number of Reported Cases of Elevated Blood Lead Levels for Virginia Children, by Health District and Race, for 2004

Health District	Race of Child						
	Asian	Black	Hispanic	Other	Unknown	White	Total
ALEXANDRIA	1	3	0	0	2	1	7
ALLEGHANY	0	0	0	0	8	4	12
ARLINGTON	2	1	2	2	5	0	12
CENTRAL SHENANDOAH	0	1	6	3	19	8	37
CENTRAL VIRGINIA	1	13	0	0	3	10	27
CHESAPEAKE	0	5	0	0	2	1	8
CHESTERFIELD	0	3	3	0	3	7	16
CRATER	0	12	1	1	7	6	27
CUMBERLAND PLATEAU	0	1	0	0	0	8	9
EASTERN SHORE	0	7	1	0	3	5	16
FAIRFAX	2	5	6	3	35	9	60
HAMPTON	0	3	0	0	4	0	7
HANOVER	0	0	0	0	4	4	8
HENRICO	0	4	0	1	13	4	22
LENOWISCO	0	0	1	0	0	3	4
LORD FAIRFAX	0	3	3	1	1	15	23
LOUDOUN	0	2	0	0	1	0	3
MOUNT ROGERS	0	0	0	0	1	10	11
NEW RIVER	0	0	0	0	3	1	4
NORFOLK	3	17	0	1	1	6	28
PENINSULA	0	11	1	0	2	2	16
PIEDMONT	0	10	0	0	1	5	16
PITTSYLVANIA/DANVILLE	1	15	0	1	8	3	28
PORTSMOUTH	1	7	0	2	0	4	14
PRINCE WILLIAM	0	2	0	1	0	3	6
RAPPAHANNOCK	0	1	1	2	14	3	21
RAPPAHANNOCK/RAPIDAN	0	0	0	0	4	0	4
RICHMOND CITY	1	90	3	1	10	32	137
ROANOKE CITY	0	10	0	0	17	9	36
SOUTHSIDE	0	10	0	0	3	3	16
THOMAS JEFFERSON	0	2	0	0	6	6	14
THREE RIVERS	0	7	0	1	0	9	17
VIRGINIA BEACH	1	1	2	0	3	1	8
WEST PIEDMONT	0	1	0	0	2	3	6
WESTERN TIDEWATER	0	14	0	2	1	6	23
Total	13	261	30	22	186	191	703

Reported Cases and Rate per 100,000 Population for Virginia Children with Blood Lead Levels ≥ 10 µg/dL, by Age Group, for 2004

Age	Population Total*	2004 Lead Cases**	Rate per 100,000
0 to 4	498,386	588	118.0
5 to 9	481,049	105	21.8
10 to 14	518,625	9	1.7
Total	1,498,060	702	46.9

Reported Cases and Rate per 100,000 Population for Virginia Children with Blood Lead Levels ≥ 10 µg/dL, by Race of Child, for 2004

Race	Population Total* Age 0 to 14	2004 Lead Cases***	Rate per 100,000
Nonwhite	464,996	296	63.7
White	1,033,064	191	18.5
Total	1,498,060	487	32.5

* Population totals based on 2004 estimates from the Census Bureau.

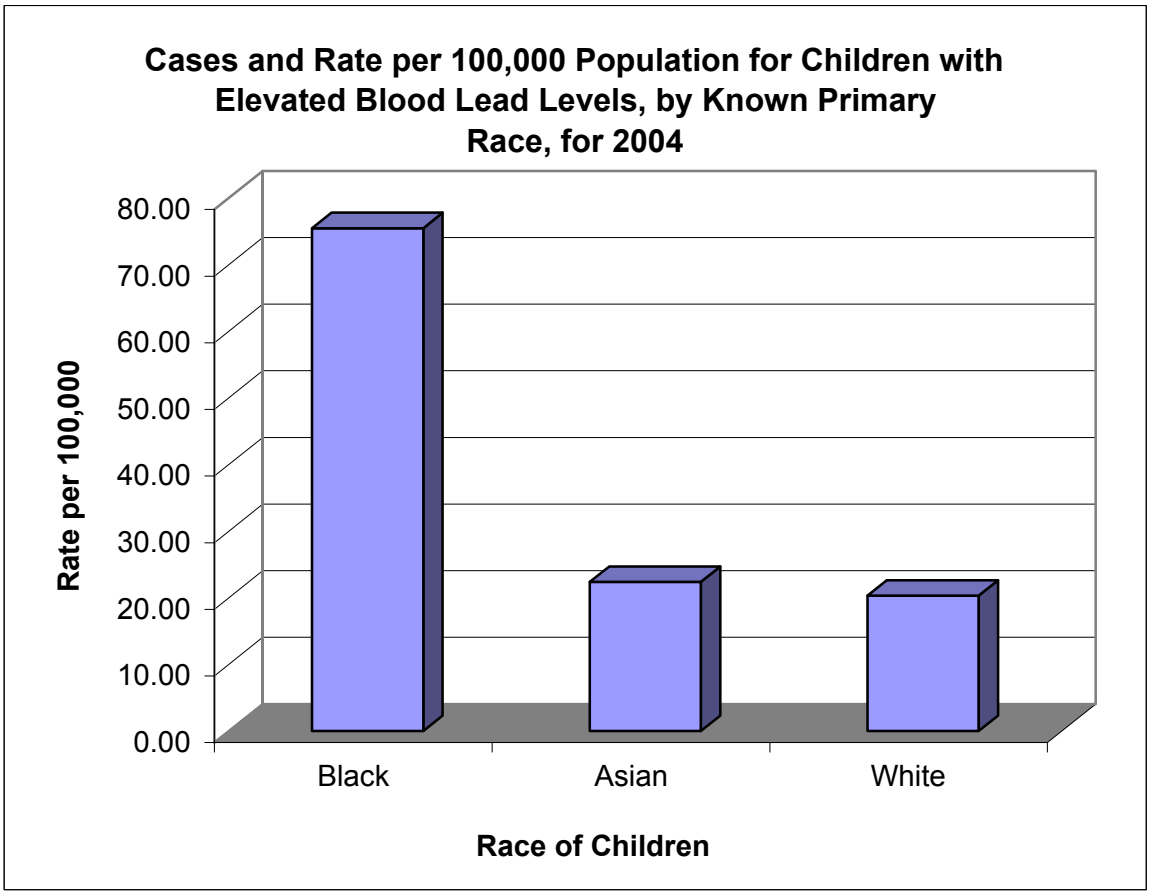
** Excludes reported case of fifteen years of age (n=1)

*** Excludes reported cases of unknown race.

Reported Cases and Rate per 100,000 Population for Virginia Children with Blood Lead Levels ≥ 10 µg/dL, by Known Primary Race, for 2004*

Race	Total Cases	Population Total Age 0 to 14	Rate per 100,000
Black	261	345,861	75.46
Asian	13	58,061	22.39
White	191	939,658	20.33
Total	465	1,343,580	34.61

* Population totals based on 2004 population estimates from the Census Bureau.
Age 15 data (n=1) excluded from total cases.



The above data exclude children reported with unknown race, more than one race, and races not listed in the standard categories (unknown=216; other=22). The classification of Asian includes Pacific Islanders.

Patient Status of Reported Cases of Elevated Blood Lead Levels for Virginia Children, by Health District, for 2004

Health District	Health Department Patient	Non-Health Department Patient	Total
ALEXANDRIA	5	2	7
ALLEGHANY	0	12	12
ARLINGTON	2	10	12
CENTRAL SHENANDOAH	8	29	37
CENTRAL VIRGINIA	15	12	27
CHESAPEAKE	0	8	8
CHESTERFIELD	2	14	16
CRATER	2	25	27
CUMBERLAND PLATEAU	1	8	9
EASTERN SHORE	6	10	16
FAIRFAX	6	54	60
HAMPTON	0	7	7
HANOVER	1	7	8
HENRICO	2	20	22
LENOWISCO	1	3	4
LORD FAIRFAX	3	20	23
LOUDOUN	0	3	3
MOUNT ROGERS	2	9	11
NEW RIVER	0	4	4
NORFOLK	9	19	28
PENINSULA	0	16	16
PIEDMONT	0	16	16
PITTSYLVANIA/DANVILLE	9	19	28
PORTSMOUTH	6	8	14
PRINCE WILLIAM	1	5	6
RAPPAHANNOCK	0	21	21
RAPPAHANNOCK/RAPIDAN	0	4	4
RICHMOND CITY	7	130	137
ROANOKE CITY	8	28	36
SOUTHSIDE	0	16	16
THOMAS JEFFERSON	1	13	14
THREE RIVERS	0	17	17
VIRGINIA BEACH	3	5	8
WEST PIEDMONT	0	6	6
WESTERN TIDEWATER	0	23	23
Total	100	603	703

The above data are generally based on the initial screening visit for the child.

FACILITIES REPORTING CHILDREN WITH ELEVATED BLOOD LEAD LEVELS DURING 2004

Reporting Facility	2004 Cases	Percent of Total
Laboratory	663	94.3%
Hospital	29	4.1%
Physician's Office	11	1.6%
Total	703	100.0%

The majority of cases reported with elevated blood lead levels were received from laboratories, which include both private and state-operated facilities. The laboratory reporting the highest number of new cases was Labcorp (370 = 55.8%), followed by DCLS (98 = 14.8%) and American Medical (76 = 11.5%). Children's Hospital of the King's Daughters in Norfolk reported the most cases from hospitals (25 = 86.2%).

ADDRESS STATUS FOR CHILDREN REPORTED WITH ELEVATED BLOOD LEAD LEVELS DURING 2004

Address Status	2004 Cases	Percent of Total
Current Home Address	666	94.7%
Home Address Unknown	37	5.3%
Total	703	100.0%

When the child's home address is unknown, the address recorded is that of the physician or screening facility. To the extent possible, missing data are obtained through assistance and cooperation with the local health departments. In general, the percentage of cases with an unknown home address has continually been reduced from a high of 12.8% in 1994.

PATIENT STATUS FOR CHILDREN REPORTED WITH ELEVATED BLOOD LEAD LEVELS DURING 2004

Patient Status	2004 Cases	Percent of Total
Non - Health Department Patients	603	85.8%
Health Department Patients	100	14.2%
Total	703	100.0%

The majority of cases reported in 2004 were for children receiving their initial lead screening in the private sector as opposed to a local health department. The percentage of health department patients reported in 2004 (14.2%) decreased from the percentage of health department patients reported in 2003 (29.5%). The sharp decrease in health department patients between 2003 and 2004 indicates a downward trend in the numbers of children receiving their initial lead screening at a local health department.

SCREENING TEST TYPE FOR CHILDREN REPORTED WITH ELEVATED BLOOD LEAD LEVELS IN VIRGINIA DURING 2004

Screening Test Type	2004 Cases	Percent of Total
Venous	423	60.2%
Unknown	166	23.6%
Type 2	114	16.2%
Total	703	100.0%

The majority of screening test types were reported as venous. Unknown refers to a single elevated test which was not designated as capillary or venous. Type 2 refers to two or more tests with blood lead levels $\geq$ 10 µg/dL reported as either capillary or unknown. Venous tests are the preferred method of testing.

FREQUENCY OF REPEAT TESTING FOR CHILDREN REPORTED WITH ELEVATED BLOOD LEAD LEVELS IN VIRGINIA DURING 2004

Total Number of Elevated Test Results*	Number of Children	Percent of Total
1	341	48.5%
2	219	31.2%
3	71	10.1%
4	39	5.5%
5	15	2.1%
6	6	0.9%
7	4	0.6%
8	2	0.3%
9	4	0.6%
14	1	0.1%
16	1	0.1%
Total	703	100.0%

The majority of children with elevated blood lead levels in 2004 were recorded with one test $\geq$ 10 µg/dL (341 = 48.5%). Of these children, 282 were found to have lead levels in the 10 -14 µg/dL range, 29 were found to have lead levels in the 15 - 19 µg/dL range, 11 were found to have lead levels in the 20 - 24 µg/dL range, 12 were found to have lead levels in the 25 - 44 µg/dL range, and 7 children were reported with lead levels $\geq$ 45 µg/dL. While these children were reported with one elevated test result, it is possible that follow-up testing did occur but was not reported because the resulting level was less than 10 µg/dL. Of the 341 single elevated tests, 138 were reported as unknown test type, and 203 were reported as venous.

* Initial blood lead screening tests for these children were performed in 2004. The number of repeat tests were recorded through10/17/05 to provide the most current data available for each child.